



AB 1613/CHP Activities

**AB 32 CHP Working Group
March 13, 2009**

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CHP IEPR Workshop -July 23, 2009

- **New CHP Technical and Market Assessment.**
Taking into account significant policy focus on CHP (AB 32 Scoping Plan), economic changes and the interest in a portfolio standard for these resources, a new assessment of CHP potential is needed.
 - Update information on existing CHP in California
 - Evaluation technical and market potential by application for new CHP projects. (<1MW, 1-5 MW, 5-20MW, 2-100MW, >100MW)
- **Staff white paper to assess opportunities and barriers for the development of CHP at wastewater facilities.**



CHP IEPR Workshop cont.

- **Highlight other emerging or relevant issues.**
Following are a few examples:
 - Utility pilot programs that will encourage utilities to work with customers to assist, partner, or own CHP facilities.
 - CHP as a replacement for emergency back up generators
- **PIER update on research that will reduce technical barriers for CHP**



Paper on CHP Potential at California's Wastewater Facilities

Purpose

Provide a comprehensive analysis of the technical and economic potential of the combined heat & power (CHP) systems located at the wastewater treatment (WWT) plants in California.

Outline

- Status & Description of Wastewater Treatment Industry in California
- Existing & Emerging CHP Technologies for using methane from WWT Plants
- Financing of CHP Projects at WWT Sites.
- Barriers to Development of CHP at WWT Plants
- Staff Recommendations for Fostering CHP at WWT Plants

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AB 1613 – Energy Commission OIR Schedule

- Draft Guidelines Posted – 3/30/09
- Committee Workshop 4/13/09
- Comments On Draft Guidelines due 4/27/09
- Staff Workshop (if necessary)
- Draft Proposed Guidelines – early August 2009
- Committee Workshop – 9/16/09
- Comments – 9/30/09
- Proposed Guidelines posted for 30 days
- Adoption at Business Meeting – November 2009



AB 1613 Energy Commission Website and Service List

The service list for the Energy Commission's AB 1613 Rulemaking is handled electronically.

We encourage those who are interested in receiving notices and documents to sign up for the list server at the our website.

<http://www@energy.ca.gov/wasteheat>



AB 1613 Guideline Development

**AB 32 CHP Working Group
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AB 1613 Guidelines for Qualifying CHP Systems

- CHP System Performance Requirements
- Application Process and “Certification”
- Annual Reporting and Verification
- Compliance



CHP System Performance Requirements

- Electrical Generating Capacity
 - Not to Exceed 20 MW_{net, Nameplate}
- Waste Heat Utilization
 - ~Same as in Self Generation Incentive Program
 - Sized no larger than maximum connected on-site thermal load
- Minimum System Efficiency
 - 60% HHV
- Greenhouse Gas Emissions
 - No more than 1,100 lb/MWh CO₂ based on fuel chargeable to power
- Criteria Pollutant Emissions
 - NO_x less than 0.07 lb/MWh, with CHP credit
- Technologically Feasible
 - Commercially Available or Testing Laboratory Certified



Application Process and “Certification”

- Documentation of Site Loads and Duty Cycles
- CHP System Engineering Design and Expected Performance
- Conformance to Technical Requirements
- Conformance to Interconnection Requirements
- Testing, Reporting, Maintenance and Compliance Plan
- “Certification” and Approval of Application Materials by Energy Commission



Reporting, Performance Verification and Compliance

- Reporting according to an Approved Testing, Reporting, Maintenance and Compliance Plan
 - Monitoring and Reporting according to accepted standards
- 1 to 3 Years to bring non-complying CHP Systems into conformance
- Energy Commission Compliance Audits